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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,221	09/02/2004	James Michael Storey	132231-1	5220
23413	7590	12/10/2004	EXAMINER	
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			RODRIGUEZ, WILLIAM H	
		ART UNIT		PAPER NUMBER
		3746		

DATE MAILED: 12/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/711,221	STOREY, JAMES MICHAEL
	Examiner	Art Unit
	William H. Rodriguez	3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-16 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 1-13 and 15 is/are allowed.
- 6) Claim(s) 16 is/are rejected.
- 7) Claim(s) 14 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 02 September 2004 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/2/04.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 14 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 recites "*said fixed amount disposed circumferentially around said variable amount*" in line 9. As written, the claim does not positively recite structural limitations to further define the apparatus rendering the scope of the claim indefinite. Examiner suggests replacing such limitation by --said means for supplying said fixed amount of said compressor discharge air disposed circumferentially around said at least one injection tube for supplying said variable amount of said compressor discharge air--. Appropriate correction is required.

Claim 16 recites "*said fixed amount is disposed concentrically around said variable amount*" in line 9. As written, the claim does not positively recite any structural limitations necessary to carry out the recited method steps. Thus rendering the scope of the claim indefinite. Examiner suggests replacing such limitation by --said fixed amount of said compressor discharge air disposed concentrically around said variable amount of said compressor discharge air--. This change does not place the claim in condition for allowance but merely clarifies the language of the claim.

**Note:** In order to place claim 16 in condition for allowance, applicant is encouraged to add structural limitations necessary to carry out the recited method steps. For instance: *A method*

*for quenching combustion in a combustor of a gas turbine comprising: a combustor body having an aperture; a casing enclosing said body and defining a passageway therebetween for carrying compressor discharge air; at least one injection tube disposed between said aperture and through said casing; and a collar disposed concentrically around said at least one injection tube, said method comprising: supplying a fixed amount of said compressor discharge air into said combustor body through said collar; and supplying a variable amount of said compressor discharge air into said combustor body through said at least one injection tube, said fixed amount of said compressor discharge air disposed concentrically around said variable amount of said compressor discharge air.* Examiner would favorably consider the case in condition for allowance, if claim 16 is amended as the claim drafted by examiner above.

***Claim Rejections - 35 USC § 102***

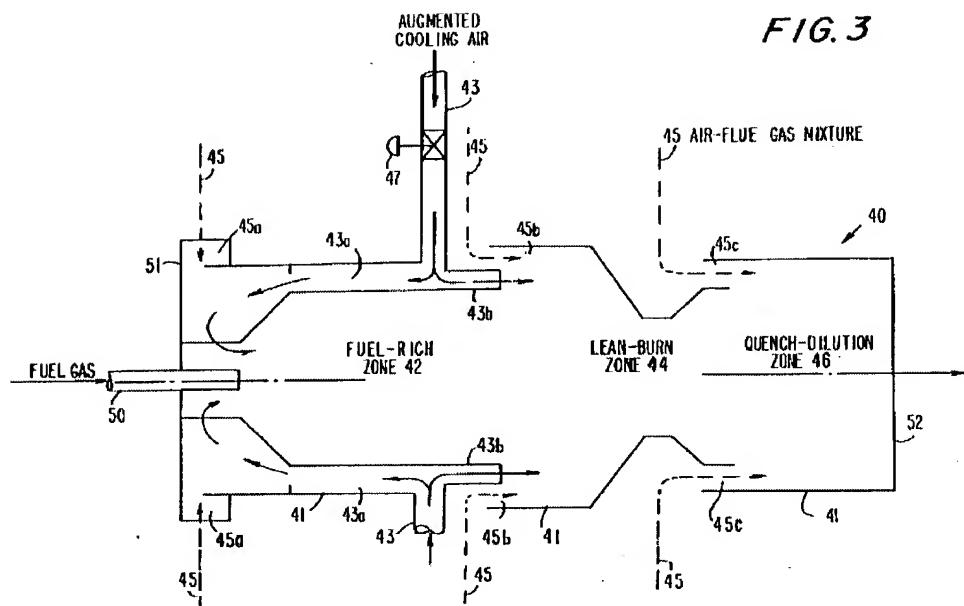
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

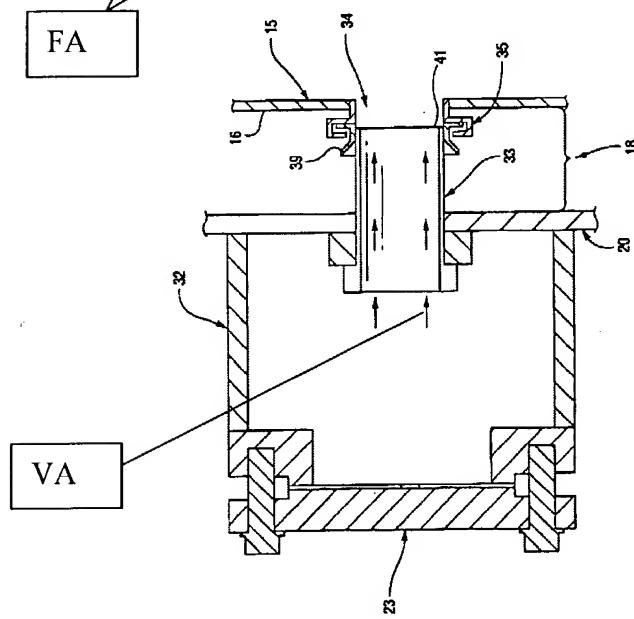
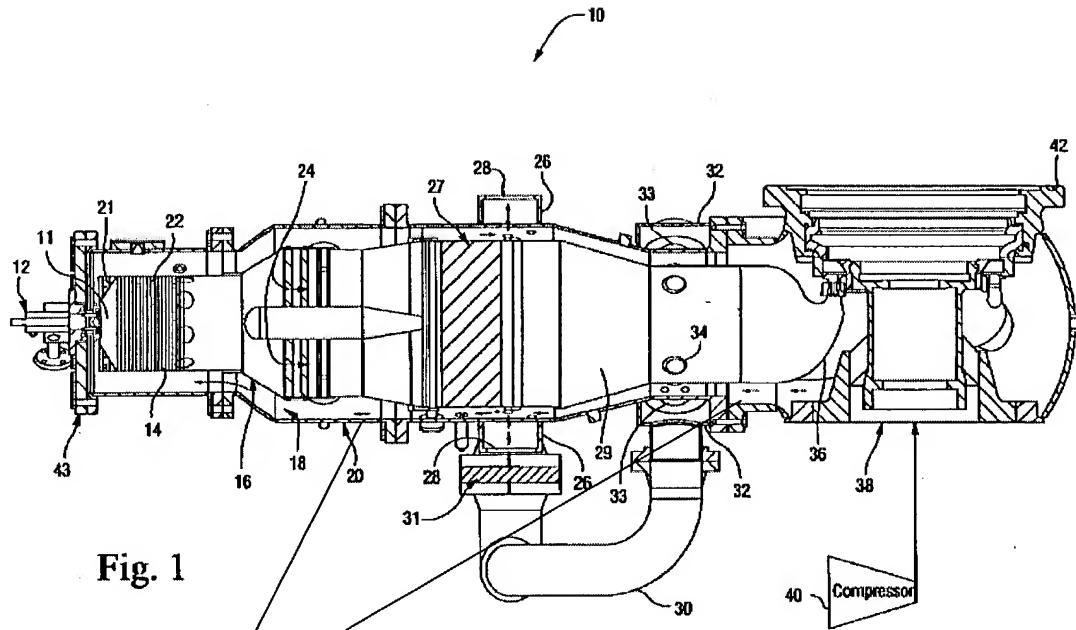
4. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by **Robertson Jr. et al.** (U.S. 5,950,417).

FIG. 3



**Robertson** teaches supplying a fixed amount 45 of compressor discharge air into a combustor body of gas turbine engine; and supplying a variable amount (43, by adjusting the opening/closing of the valve) of compressor discharge air into the combustor body. See **Figure 3** of Robertson above.

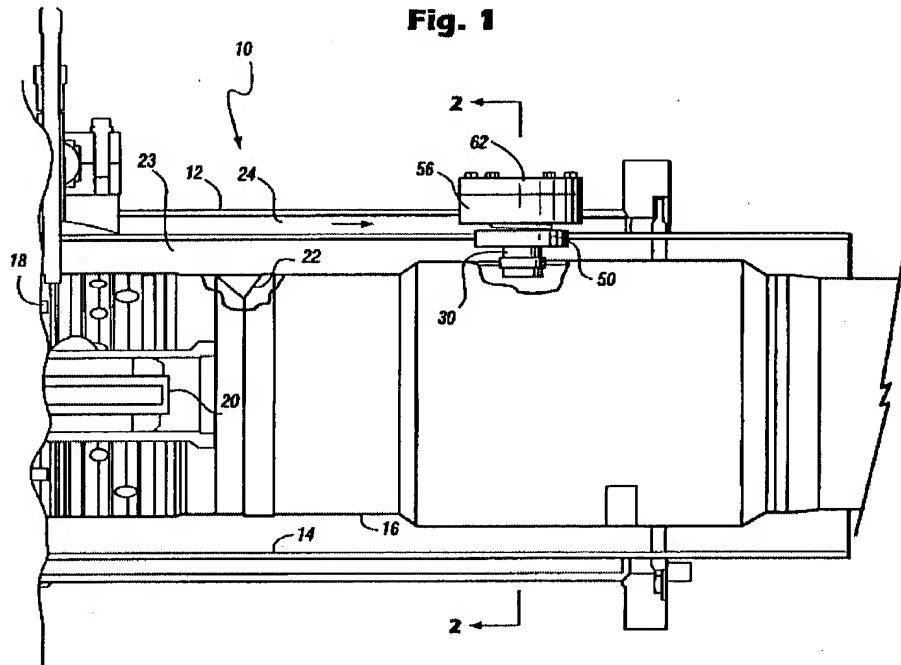
5. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by **Kolman et al. (U.S. 6,449,956)**.



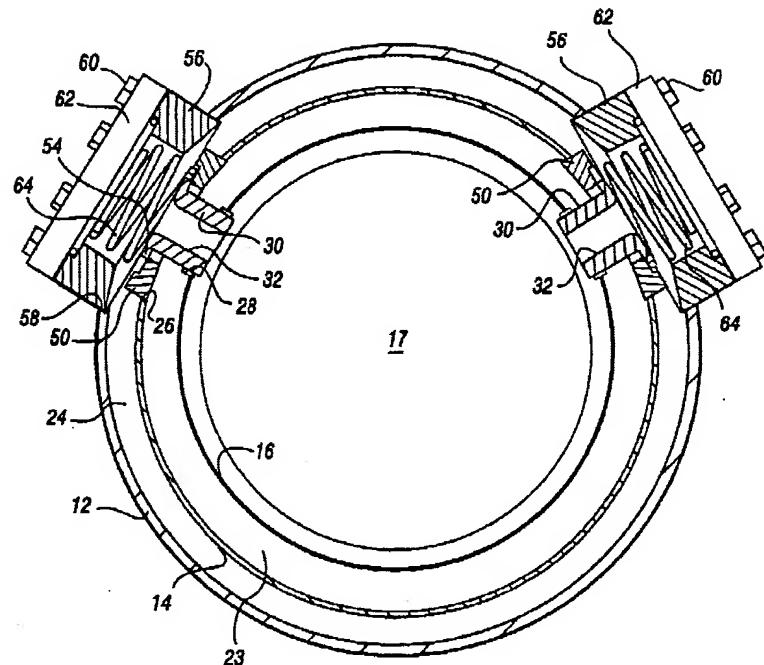
**Kolman** teaches supplying a fixed amount FA of compressor discharge air into a combustor body of gas turbine engine; and supplying a variable amount (VA, see column 4 lines 6-7) of compressor discharge air into the combustor body. See **Figures 1, 2** of Robertson above.

6. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by **Steber et al. (U.S. 6,331,110)**.

**Fig. 1**



**Fig. 2**



**Steber** teaches supplying a fixed amount 26, 28 of compressor discharge air into a combustor body of gas turbine engine; and supplying a variable amount (30, 32 varying the air flow by changing the insert 30, column 3 lines 43-45) of compressor discharge air into the combustor body. See **Figures 1, 2** of Steber above.

***Allowable Subject Matter***

5. Claims 1-13 and 15 are allowed.

With respect to claim 1, the following is an examiner's statement of reasons for allowance: the prior art of record neither discloses nor makes obvious the combination set forth in the independent claims, and especially does not show "*at least one injection tube for supplying*

*an amount of said compressor discharge air into said combustor body, said injection tube is disposed between said aperture and through said casing; and a collar disposed at said passageway, wherein said collar surrounds said injection tube so that said injection tube passes through said collar and a gap is disposed between said collar and said injection tube, said collar having a plurality of openings", in combination with the other claim limitations.*

With respect to claim 15, the following is an examiner's statement of reasons for allowance: the prior art of record neither discloses nor makes obvious the combination set forth in the independent claims, and especially does not show "*at least one injection tube for supplying a variable amount of said compressor discharge air into said combustor body, said injection tube is disposed between said aperture and through said casing; and a collar disposed at said passageway and mounted to said combustor body and extending to said injection tube, said collar configured to supply a fixed amount of said compressor discharge air to said body*", in combination with the other claim limitations.

Claim 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

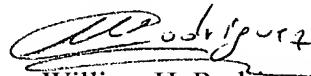
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Contact information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Rodriguez whose telephone number is 571-272-4831. The examiner can normally be reached on Monday-Friday 7:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl J Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William H. Rodriguez  
Examiner  
Art Unit 3746